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Robert A. Nash, Secretary-Treasurer, 20 S. Baldwin Ave.
Sierra Madre, California

Volume I May, 1948 Number 4

## SAILING GUNBOATS OF THE UNITED STATES NAVY

Wayne B. Yarnall

When King George sent his Royal Navy to America to subdue the rebels, the Colonial's first line of defense was in the coastal waters. The rebels quickly armed their smaller vessels, the larger whale-boats and the small sloops and schooners. From this group of vessels evolved a class of armed craft, the American Gunboat. The Navy considered this class to include small boats armed with one to four guns of varying caliber. They were rigged as one or two-masted lateeners, cutters, schooners and lug-rigged vessels.

At the beginning of the American Revolution, when no navy existed, it was only natural that the first armed craft would fall in this class. It was not until about a year after the conflict was under way that specific designs were made for the gunboats. In most cases, the design did not deviate from the ordinary small open boats used by the colonists for fishing and transportation. All gunboats were

fitted with sweeps and were of very light draft. Armed with one or two guns and augmented with small arms, the craft were used to patrol the coastal and inland waters. Often they appeared in support of radeau, gondolas, bateau and small brigs and schooners. Some were equipped with weather-cloths all around to mask the crew from small-arms fire when in action.

Very little information about the early gunboats of the American Revolutionary Navy has been handed down to us. What has been handed down is not entirely reliable. The small vessels of this period were often confused with the large round-bottomed whale-boats, the cutters, galleys, gondola, radeaux, bateau and the barge.

Employment of this class of vessels by the American Navy ceased with the end of the Revolution. This was only natural as they had little application during peace time.

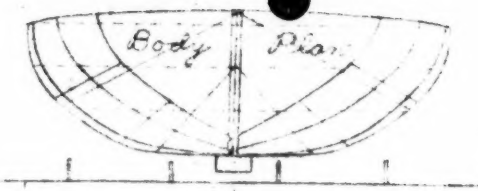
The War of 1812 found the gunboat at the height of it's career. Their use in the wars abroad, especially in the Mediterranean campaign of 1803 and the French and Danes against the British, seems to have fostered the belief among the American naval officers that this class of vessels was a good substitute for the larger vessels of that period. At the urging of their naval advisors, Congress paved the financial way for the gunboat era. Jefferson was blamed for what followed, although it has been shown that Congress was largely responsible for reducing the Navy to a large collection of sundry types of gunboats.

With the erroneous idea that a flotilla of these small armed boats was as good as a large heavily armed brig or schooner, five experimental gunboats were built in 1803. Before fact could prove the fallacy, the Navy accumulated or built 170 of them before 1811. During this period the other classes of vessels that made up the Navy (the 38's, 44's, 74's and supporting brigs and schooners) were practically ignored. Thus, at the start of the War of 1812, the American Navy was rich in gunboats but poor in other sailing power.

The gunboats of this later period were an odd collection of different sizes and designs, and included galleys, cutters, sloops and small schooners. The first craft were small double-ended boats about 40 foot long, one-masted and lateen rigged. They were equipped with sweeps and armed with an 18-, 24-, or 32-pounder medium gun on a pivot and a small carronade on a truck carriage. The design, size and armament went through various stages until the last-built,

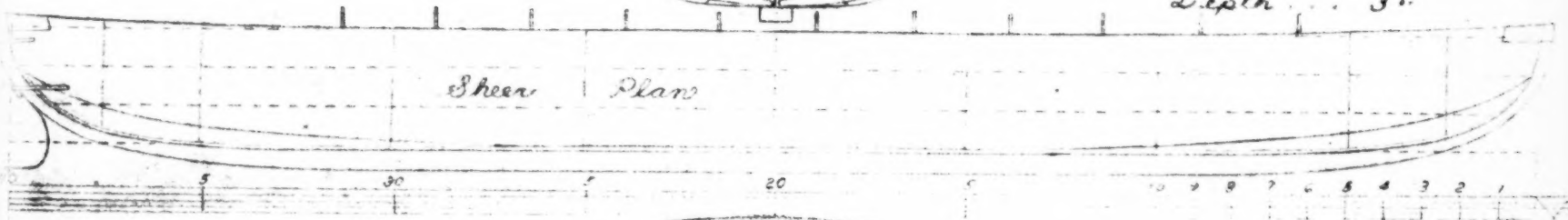
# Gun Boat

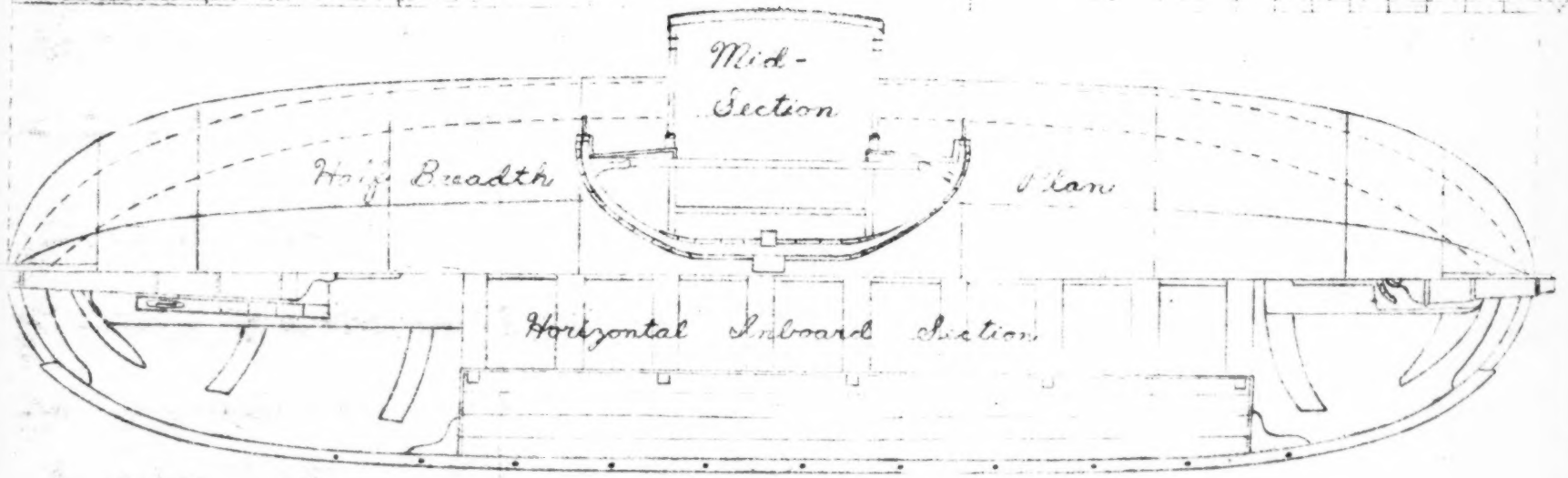
ca. 1814

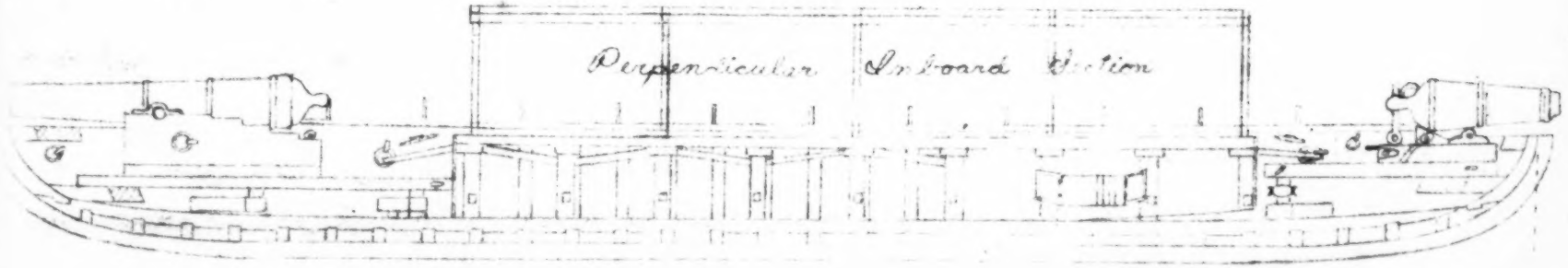



Principal Dimensions

| | Ft. | In. |
|---|---|---|
| Length . . . | 40 | 0 |
| Breadth . . . | 10 | " |
| Depth . . . | 3 | " |



and also the largest, was really a small, well-armed schooner, 75 foot long.

It is interesting to note that eight of the earliest boats of this class were sent from the United States to the Mediterranean in 1805. They were Gunboats #2, #3, #4, #5, #6, #7, #8 and #9. Gunboat #7 put back on her first attempt to cross the Atlantic. On her second attempt she went missing with all hands. The other seven reached the Mediterranean safely.

The boats that crossed the Atlantic were prepared for the trip by having their guns stowed below, adding a false keel and changing their rig to that of a sloop. It has been recorded that when Gunboat #5 was ready for the trip across, she had only one foot of freeboard. The crew consisted of two officers, fifteen seamen, one marine officer and four marines. The courage and fortitude combined with their wonderful seamanship in crossing the Atlantic, fighting the Mediterranean campaign and bringing the boats safely back is to be respected.

The designers of all the gunboats of this period are not known, or are the constructors. Fox, as Naval Constructor, designed Gunboats #3 and #5 and many of the later and larger ones. Many other naval men took a hand in their design, among them Capt. John Rodgers, Capt. James Barron and Capt. Charles Stewart. The gunboats were built in many different places - Havre de Grace, Md., Portland, Me., Eddyville, Ky., Marietta, Ohio, Cincinnati, Ohio, Greenwich, R. I., New York, N.Y., Philadelphia, Pa., Washington, D. C., Hampton, Va., and Hudson, N.Y. The names of many of the constructors and builders are recorded. The Agents and Superintendents that represented the United States Government were as numerous then as they were on Defense Corporation jobs in the last war. They were outstanding naval officers, Rodgers, Preble, Hull, Decatur, Stewart and others. It is not known why officers of this high caliber were assigned such seemingly unimportant work. Perhaps this occurred while their ships were blockaded in port. Designers of the vessels in this class that were built on inland waters have been recorded, but cannot be taken as reliable. This is particularly true of those on the western rivers, for some of the constructors were more politicians than shipbuilders.

Heretofore, only a few of the original plans for these gunboats have turned up. Recently, an unpublished plan was discovered which is available to members of the Nautical Research Guild. It is very important as it is a plan of one of the smallest gunboats constructed during this period.

The length on deck is 40 feet as contrasted with the 71-foot length of Gunboats #3 to #10. The drawing of the 40-foot gunboat was made by William Spotswood and is noted "Copied from Original. City of Washington, Feb. 7, 1814. Examiner William Doughty, Naval Constructor". From this note, however, it cannot be concluded that it was designed in 1814, or that Doughty or Spotswood designed her. Because of her small size it can be assumed to have been one of the early boats. She was a double-ender, could be rowed either end foremost and probably was rigged with a single lateen sail. For such a small craft she was heavily armed.

With the end of the War of 1812, the gunboat's star dropped into oblivion. Many of the naval officers who recommended adoption of these little gunboats probably regretted it. Congress, money wise and almost too late, appropriated funds for larger vessels. Jefferson was publicly blamed for starting the whole thing.

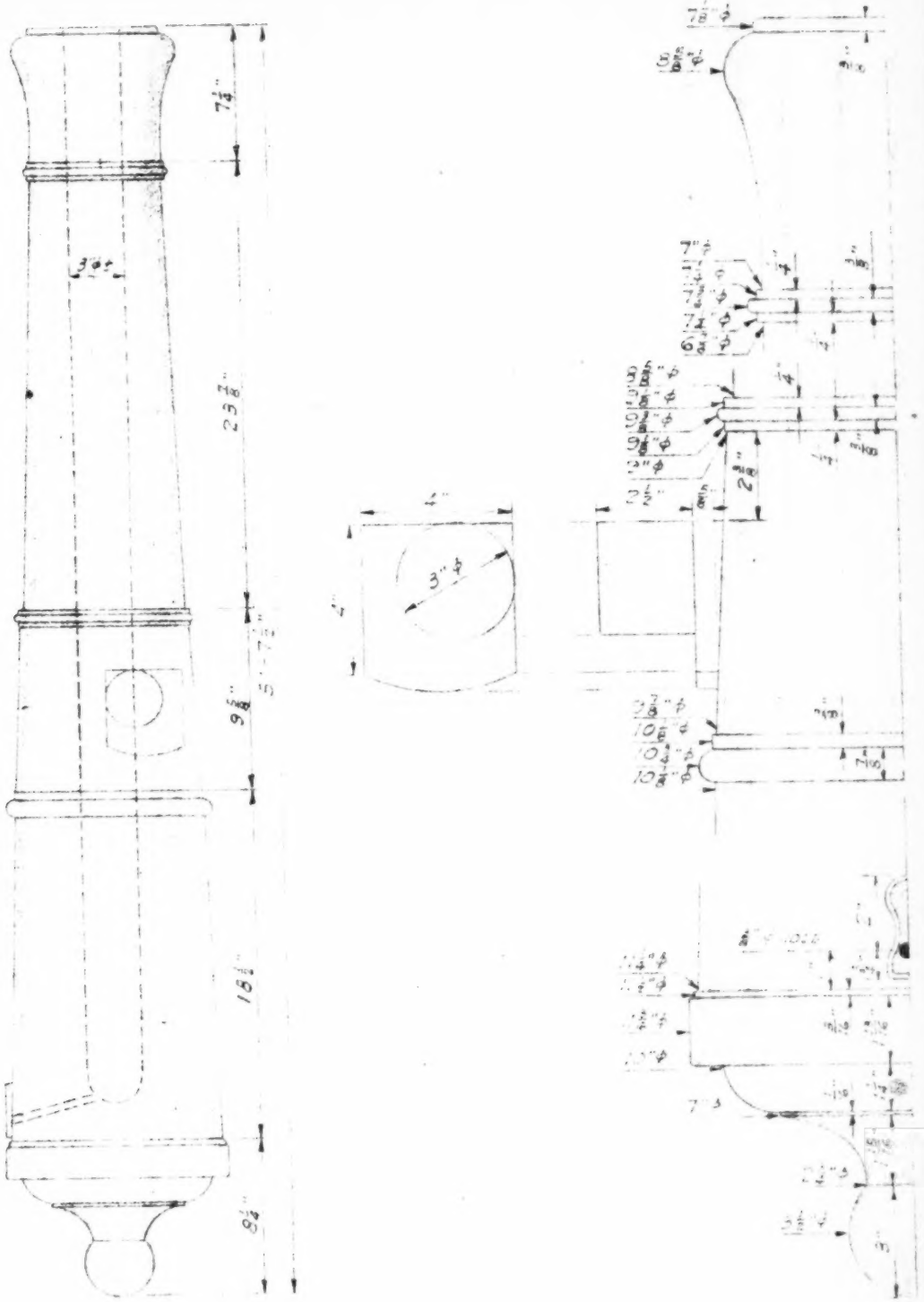
SEA CANNON THROUGH THE AGES. PART II.

Winthrop Pratt, Jr.

BLOOMFIELD GUN, named after its inventor. I have no information other than the fact that it was in use in England in 1814 and that the 24-pounder seems to be the only caliber mentioned. Farrow says they were ordinary cast-iron guns consisting of a 32-pounder of 5,600 pounds and a 24-pounder of 5,000 pounds weight and that they were used as late as 1895 in the British Navy.

BLUNDERBUS derives from a corruption of the German word "donner" - thunder. A hand-gun of the 17th and 18th centuries, often used on shipboard as a swivel. Similar to the wall-piece, this gun had its muzzle flared like a trumpet. The barrel was usually of brass and varied from 17" to 28" or more in length. They were muzzle-loaders and fitted with flint-locks.

BOMBARD or BUMBARD ( sometimes "Bumberde"). Relation to the word "bomb" is only indirect. Used from the 14th to the 16th centuries, these are perhaps the earliest types used at sea. Farrow says they were first made of wood banded with iron, then of sheet-iron strengthened with hoops and brazed (welded), and later of iron bars laid longitudinally and hooped like the staves of a cask. They were breech-loaders - that is, the chamber was removable. They were, in early times, called "mortars" and "vases", the first forms being conical in shape and



ENGLISH FOUR-POUNDER
Circa 1780

externally resembling an apothecary's mortar. They used stone shot only. The later types made by the Lombards were cast in bronze, after which the cast type became general. The bombard was the principal piece of sea-going artillery until about the first quarter of the 16th century, and both the cast and the built-up types were in use at the same time, often on the same ship. They have been listed as large as 25" bore, but it is very doubtful if any so large could have been used on the ships of those times. Those used on shipboard were mounted on carriages with four wheels, and one such "great bumberde of brasse" is listed in the inventory of the "Henry Grace a Dieu" (Great Harry) in 1514.

BOMBARDA. Italian - a mortar. This name also applied to a two-masted vessel using the mortar as its principal weapon. There was later a merchant vessel so called of the same type, but not so armed.

BOMBARDELLE. French. Farrow says it probably dates from the early 15th century - perhaps earlier. It is the earliest known type of portable firearm, at least in Europe. One authority describes it as a "hollow cylinder with a touch-hole for firing, with a match, and attached to a staff and held by a foot-soldier". I find no conclusive proof that this piece was used at sea, but is likely, as early ships were manned by sailors for handling the ship and soldiers for fighting.

BREECH-LOADER denotes a gun wherein the charge (and sometimes the shot) were inserted at the breech instead of the muzzle. All evidence supports the belief that the breech-loading cannon antedates the muzzle-loader, and it is known that both types were in use simultaneously - often on the same ship, the muzzle-loader finally superceding the other until the last years of sail when mechanical means made it possible to construct a practical breech-loading gun. In virtually all of these breech loaders, the powder chamber was a separate unit, which after charging, was screwed into place, or in the smaller pieces, simply inserted and wedged. Except for the largest pieces, all breech-loaders had extra chambers which were kept charged and ready - actually a "quick-firing" type.

BROOKE GUN, named after its inventor. A cast-iron reinforced and rifled piece of the Civil War period. Some 10" and 11" guns were not rifled but were made to fire a special steel ball. Most were rifled, however, and were made in three calibers, 6.4", 7", and 8", as well as

three 7" guns of extra length, rifled, and cast without trunnions. Those trunnions were forged with their band in one piece, or cast in bronze, the trunnion-band being slipped on loosely, the shock of the recoil being transferred by a heavy wrought-iron breech-strap to the trunnions and carriage.

CALIVER. A 16th century light hand-gun, fired from the shoulder, but supported on a staff like a swivel. Farrow says "a hand gun or arquebuse". Supposed by many to be the old name for a matchlock or carrabine. Bore was of a uniform size so that the common ammunition of the regiment would fit all pieces. (The first attempt at standardization?) Of greater caliber than the arquebuse, but lighter than the musket, and Farrow, contrary to others, says it was fired without a rest.

CANNON - the name of a type originating in the 16th century. It was the largest type on shipboard, excepting the bombard and curtal. Bourne, Norton, and others give the different classes of cannon in somewhat the following order: eldest double cannon, ordinary double cannon, cannon royal, French double cannon, cannon, demi-cannon, and French demi-cannon. Sir Jonas Moore, writing in 1694, tops the list with "whole cannon" (larger than Bourne's eldest double cannon), then "cannon" (which includes all other sizes of Bourne and Norton) and then adds to the list the smaller "quarter-cannon" (16- to 18-pounders) about equal to the culverin of the previous century. Tartaglia, in 1583, lists cannon all the way from 120-pounders to 20-pounders. Cannon generally seem to have been shorter and thicker of metal, in proportion, than culverins of the same caliber.

CANNON PEDRO ( or Petro). 16th century stone-throwing cannon in which the powder chamber was usually smaller than the bore. They were heavy pieces.

CANNON ROYAL. 16th century French (see under Cannon).

CANNON SERPENTINE. 16th century forbear of the culverin. An unusually long cannon, firing lead shot and "dice-shot" (small lead cubes).

CARRIAGE-GUN. Any piece of ordnance mounted upon a wheeled carriage.

CARRONADE. A short heavy gun of the late 18th and early 19th centuries. It was developed at the Carron works in Scotland as a result of experiments by Melville (who

produced the Melvillade) and Gascoigne, manager of the Garron Works (who produced the Gasconade). Carronades were first adopted by the English Navy in June, 1779, and were made in sizes from 12- to 68-pounders. They were designed for close-range work, and fell into disuse before the middle of the 19th century. Their mounts were of both the recoiling and non-recoiling types, as well as being occasionally mounted like a carriage-gun, and sometimes pivot-mounted. The 32-pounder and the 24-pounder seem to have been the most popular. Carronades were used on all classes of ships, and were mounted on the upper deck, spar deck, forecastle and quarter-deck. Farrow says they were little used except by the French and English, but we know that they were used considerably on American ships of war - particularly on the frigates and privateers of 1812.

To be continued.

## AN UNUSUAL HALF MODEL OF A FAMOUS FISHING VESSEL

### Driftwood Gaff

It is quite well known that the builder's half hull is a truly American invention. Many forms of this useful ship builder's aid have appeared since the early days, 1790. Dr Stillman in his "Development of the Builder's Half Hull in America, Vol. I, No. 7, 1933, Marine Historical Association, Mystic, Conn., has described most of them. The writer's interest was aroused in this handsome marinalia by Mr. Lewis H. Story of Essex, Mass. Mr. Story is a ship builder, designer, and maker of builder's half models. Mr. Story gave me a half model of the Gloucester fisherman ELSIE built at Essex in 1910. This half model differs from those described by Dr. Stillman in that it combines antique material with the model maker's skill. The material employed in its construction is as follows:-

Underbody - basswood from an old piano
Waterline - from the veneer of old strawberry boxes
Inlaid station points - Old strawberry boxes
Topsides - old black walnut table leaves discarded by the neighbors (Perhaps from an old sea captain's table)
Backboard - The rock oak panel from an old fashioned bedstead
Finish - old fashioned hand rubbed linseed

The scale of the model is ½ inch. It is unusual in

that narrow slots or grooves have been cut into the underbody from the keel to the waterline. Small strips of strawberry box veneer have been glued in to represent the stations generally shown in a profile drawing. The top sides extend to the waist line. An extra piece is sprung on and used as a cover board. It is fastened with heavy screws. This is a little narrower than the top side and represents the bulwarks and rail cap. The rail cap and bulwarks were marked for cutting with a tiny marking gauge invented by Mr. Storey. The "trim" consisting of rudder, keel and cut-water are made of oak.

A collection of half-models makes an interesting border around the dining room, living room or your office. There is a wide variation in the forms of construction of these half hull beauties as you can determine from Dr. Stillman's Bulletin. If you decide upon such a collection, you will find that your skill improves materially with each one completed. Personally, I would advise every individual who contemplates a fine ship model to make a half model as a preliminary step. Then you can always see "how she is going to look" and at the same time provide yourself with a handsome and inspiring piece of your handiwork.

MY WATCH BELOW

R. F. Sewell

When four bells were sounded on the bridge my relief made four bells and sang out "Lights are bright sir", and I went below to sit out the last half of my watch.

For diversion, and you can do the same, I went to the forepeak and cut off approximately four feet of three inch rope from a coil. On one end, first a wall, then a crown, then tuck up, then tuck down. Next measure off the width of a hand and add a Matthew Walker with the ends left long. Seize the ends of the Matthew Walker and worm and serve the handle. Drive ten-penny nails through a board about three inches wide, hair brush style, and use this to comb out the rope yarns until they are straight. Lash the ends so they may be cut off straight and you will have a corking fine fire place or dust brush. A little rolling between the palms will remove the loose yarns and save you from a howling gale from the Mrs. when you use this brush on your fireplace.

PROSPECTIVE MEMBERS

Harry D. Hamilton

A circular letter relating to prospective members was mailed to members last month. Since then, some new members have joined and it is necessary to impress on all the necessity to establish a certain procedure to clear our mailing list and to eliminate duplication of effort.

Each member will receive one copy only of the Secretary's Monthly Letter unless more copies are specifically requested. Additional copies for distribution to prospective members may be had from Mr. Harry D. Hamilton, who will handle all new memberships in the future. Will members please send the names and addresses of prospective members to Mr. Hamilton, 3800 Granada Ave., Whittier, California. Prospects will be mailed the Letter for two months.

The selection of new members is a personal matter of our members and application blanks must be properly endorsed in the space provided by sponsors of new applicants.

SECRETARY'S NOTES

The steel bark KAIULANI, ex-STAR OF FINLAND, ex-KAIULANI was recently sold according to Mr. John V. Naylor, of Long Beach, Calif. The buyer, Vincente Madrigal, Phillipine shipowner, reportedly paid $18,250 for her as she lay in Subic Bay. The seller was the U. S. Maritime Commission. She was built by A. Sewall & Co., of Bath, Maine for general trades in 1899 and in the same year was sold to Williams, Dimond & Co., of San Francisco for the sugar trade. She was 225.7' x 42.3' x 20.0' - 1,699 tons gross and 1,425 tons net. During her ownership by Williams, Dimond & Co. she was under the command of Captain Richard Dabel. In 1910 she was purchased by the Alaska Packers Association for the salmon fishery and renamed STAR OF FINLAND. She was laid up with the other "Stars" in 1927/28 at Alameda, Calif. In 1937 she appeared as the ship WILLIAM BROWN in the Paramount film "Souls at Sea", under the command of Captain Adolph Schultz. She was purchased by D. H. Bates, of Portland, Oregon in 1939 and again laid up in Alameda. Two years later she was owned by the Hammond Lumber Co., who renamed her KAUILANI and placed her in Panamanian registry. At this time she was under the command of Captain H. G. Wigsten. The KAUILANI sailed for South Africa with a lumber cargo in July, 1941. She was later sold in Hobart and towed to Sydney, where she was cut down to lower masts and converted to a

motorship. The lower masts were later removed. She was reported sunk by Japanese aircraft off Guadalcanal. At one time she had the reputation of being one of the fastest square-riggers in the Pacific. I wonder if it wasn't the STAR OF RUSSIA or the STAR OF PERU that Mr. Madrigal bought.

I see that the big Gloucester schooner GERTRUDE L. THEBAUD was sunk and damaged beyond salvage last February in LaGuayra, Venezuela. "The Boatsteerer" took some note of her sinking in his column "The Gam" in this month's "Yachting".

Mr. Naylor, by the way, has been spending his week-ends aboard the PACIFIC QUEEN, ex-STAR OF ALASKA, ex-BALCLUTHA sketching and photographing all her details. Anyone know the whereabouts of her lines?

Mr. Winthrop Pratt, of Dorchester, Mass. has been gathering material for a book for about twenty years, of which he says

> "I have taken up each part of a ship as a separate treatise, and am doing all the illustrations myself. For example: I have a couple of pages of drawings of galley chimneys alone, a whole chapter on anchors with probably three or four dozen scale drawings of different types, and my section on ordnance covers everything I could find on sea-cannon from the first used at sea up to the end of sail. This would make a book in itself.
>
> I might add, that there will be about eighteen or twenty chapter headings, and all statements are documented with a bibliography for each section, and I used (in almost all cases) original source material, a good deal of which I have had to translate from the French and Dutch."

Mr. Harry D. Hamilton, of Whittier, Calif. is currently enthusing over a proposed reprint of Benjamin Franklin's "Maritime Observations". This work was originally published in the Transactions of the American Philosophical Society in 1786 and included the first American publication of a chart of the Gulf Stream. Franklin first published his chart of the Gulf Stream in England in 1769/70 and the following year published another in France.

Mr. Richard E. Lawton, of the Bronx, New York City has built several models of early American privateers and is now engaged in research preliminary to building the ENTERPRISE. His specialty is privateers and U. S. Navy through the War of 1812. Mr. Lawton has a wonderful library, which he has

been collecting for about twenty-five years. It includes either original editions or reprints of all the important books on shipbuilding, rigging, etc.

We welcome to membership in the Guild, Mr. Lawrence W. Jenkins, Director of the Peabody Museum at Salem, Mass. Mr. Jenkins collects ship portraits and is the fortunate possessor of two paintings by Anton Roux, Sr.

Another new member, Mr. Fred S. Rice, of Tacoma, Wash., is a ship model builder. Mr. Rice served in the U. S. Navy from 1906 to 1910 and did his training in the hermaphrodite brig BOXER. He has submitted an interesting reminiscence of the CONSTELLATION during this period for our forthcoming CONSTELLATION number. At present he is building a twenty-seven foot Chesapeake Bay Skipjack in his back yard. She will have a nine foot beam, eight foot bowsprit and a five foot cut-water with eagle head and scroll work carved thereon. She will carry 462 square feet of sail. He is also interested in old ship's guns. I hope Mr. Rice finds our present series on "Sea Cannon Through the Ages" and measured drawings to his liking.

Dr. Bernard Berenson, a new member from Portland, Oregon is a man after my own heart - anything to do with ships and the sea is grist to his mill. Dr. Berenson encloses with his application a little booklet he has written entitled "The Origin and the Chronology of the Clipper Ships". He has an article on the same subject in this month's issue of "Motor Boating". Besides building ship models, the Doctor does oil paintings of ships, a little cruising, dabbles in navigation, likes rope work and collects books. His library has been twenty years in the making.

An important collection of early navigation instruments - astrolabes, armillary spheres, terrestial globes, etc. is now up for sale in this area and it is hoped that catalog descriptions can be obtained for presentation in a near future issue of the Letter. The collection is not as large as the collection in the Adler Planetarium at Chicago, but consists of all very fine and rare items.

The Letter still stands in need of additional articles and notes. Please address them to

R. A. Nash
20 S. Baldwin Ave.,
Sierra Madre,
California

## QUERIES

The article by Winthrop Pratt, Jr. in the April Letter listing various sea cannon was read with great interest by me since old ordnance is a hobby of mine. One piece in particular, the Armstrong Gun, caught my attention. And the more I thought about it the more fascinating it became. Mr. Pratt mentions "a 9-inch, 12 ton gun and a 100 ton gun". It's that 100 ton gun that did it. After finding the number of cubic feet of iron and steel in 100 tons, I sketched a gun, carriage and chassis and arrived at such a huge package of hardware that further inquiry seemed to be in order. I must have "missed the boat" somewhere. Would Mr. Pratt give us a few more details as to size and ships these guns might have been used on?

– John V. Naylor, 2369 Delta Ave., Long Beach, Calif.

I am trying to locate J. W. Pierce who painted New England ships. The Peabody Museum has photographs of four vessels by him all painted in 1869 or thereabouts. These are the ships – RADIANT and VERENA, the schooner FRANK ATWOOD and the steamer ALHAMBRA. He does not appear in the Boston Directory in the years 1869 or 1870.

– L. W. Jenkins, 273 Locust Street, Danvers, Mass.

What is the meaning of the following terms:

1 – Ties led through a calcet
2 – Thimbles inboard
3 – Mizzen handled by mouton or rope
4 – Ship style lift
5 – Braces, bowlines, and standing rigging parts of the halliards attached to stays
6 – Stays not used as attachments for halliards
7 – Ties replaced by jeers

– Harry D. Hamilton, 3800 Granada Ave., Whittier, Calif.